



UNITED STATES PATENT AND TRADEMARK OFFICE

11/13
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,207	03/15/2004	Jiahn-Chang Wu	WU-9305	8555
7590	05/25/2007		EXAMINER	
Hung Chang Lin 8 Schindler Ct. Silver Spring, MD 20903			NEGRON, ISMAEL	
		ART UNIT	PAPER NUMBER	
		2885		
		MAIL DATE	DELIVERY MODE	
		05/25/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/800,207	WU, JIAHN-CHANG
	Examiner	Art Unit
	Ismael Negron	2885

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 08 March 2007.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,4,5 and 7 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,4,5 and 7 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on March 8, 2007 has been entered. Claims 1, 4, 5 and 7 have been amended. Claim 2 has been cancelled. No claim has been added. Claims 1, 4, 5 and 7 are still pending in this application, with Claim 1 being the only independent claim.

Information Disclosure Statement

2. The listing of references in the specification (Figure 1) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

3. Claim 1 is objected to because of the following informalities: it contains minor syntax errors. Appropriate correction is required.

4. The Examiner respectfully suggests amending Claim 1 as follows:

CLAIM 1. A light bulb, comprising:

a cup for light reflection, having an open end;
a ridged metal grid formed with a first set of parallel horizontal metal plates and a second set of parallel vertical metal plates, with such plates protruding normal to the plane of said grid to form partitions, placed in the open end of said cup;
a plurality of crossing points formed by the two set of metal plates; and ~~more than one of said cross points, each being mounted at least one light emitting device~~ being mounted at more than one of said cross points facing to the cup, the emitted light beam is reflected by said cup before transmitting through said grid.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZHANG (U.S. Pat. App. Pub. 2002/0136025).

6. ZHANG discloses a lamp having:

- **a cup (as recited in Claim 1), Figure 5, reference number 13';**
- **the cup being for light reflection (as recited in Claim 1),**
paragraph 0046, line 9;
- **the cup having an open end (as recited in Claim 1), as seen in**
Figure 5;
- **a ridged metal grid (as recited in Claim 1), Figure 5, reference**
numbers 311'-314';
- **the grid including horizontal plates (as recited in Claim 1),**
Figure 6, reference numbers 311' and 313';
- **the grid including vertical walls (as recited in Claim 1), Figure**
6, reference numbers 312' and 314';
- **the metal grid including walls protruding normal to the plane**
of the grid (as recited in Claim 1), as seen in Figure 5;
- **the walls forming partitions (as recited in Claim 1), as seen in**
Figure 5;
- **the walls further forming a crossing point (as recited in Claim**
1), as seen in Figure 5;
- **the metal grid being placed in the open end of the cup (as**
recited in Claim 1), as seen in Figure 5;
- **at least one light emitting device (as recited in Claim 1), Figure**
6, reference number 21';

- **the light emitting device being mounted on the crossing point (as recited in Claim 1), as seen in Figure 6;**
- **the light emitted by the light emitting device being reflected by the cup before being transmitted through the grid (as recited in Claim 1), as evidenced by Figure 6;**
- **the light emitting device having two electrodes (as recited in Claim 4), inherent;**
- **the electrodes being connected to one of the parallel horizontal plates and one of the parallel vertical walls respectively (as recited in Claim 4), as seen in Figure 6; and**
the horizontal plates and the vertical walls being insulated from each other (as recited in Claim 4), inherent;
- **the metal grid being back-filled with a transparent material (as recited in Claim 5), Figure 5, reference number 22';**
- **the transparent material being selected from the group consisting of glass and transparent polymer composite (as recited in Claim 5), inherent; and**
- **the metal grid being partially protruded outside the transparent material for increasing heat removal (as recited in Claim 7), as seen in Figure 6.**

7. ZHANG discloses all the limitations of the claims, except the grid including a matrix of parallel horizontal plates and vertical walls forming a plurality of crossing points (as recited in Claim 1);
8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a matrix of parallel horizontal plates and vertical walls (as recited in Claim 1), since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In this case, one would have been motivated to use a plurality of the patented device of ZHANG, as necessitated by the desired number of light emitting devices, or the required heat dissipation rate.

Response to Arguments

9. Applicant's arguments filed March 8, 2007 have been fully considered but they are not persuasive.
10. Regarding the Examiner's rejection of Claim 1 (subject matter previously recited by Claim 2) under 35 U.S.C. 103(a) as being unpatentable over ZHANG (U.S. Pat. App. Pub. 2002/0136025), the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically a plurality of crossing points, such crossing points mounting a plurality of light emitting diodes (LED). The applicant further

argues that ZHANG teaches away from the claimed invention as it only discloses mounting a single LED chip at a single crossing point.

11. Regarding the Examiner's rejection of claims 4, 5 and 7 under 35 U.S.C. 103(a) as being unpatentable over ZHANG (U.S. Pat. App. Pub. 2002/0136025), the applicant present no arguments, except stating that such claims depend directly or indirectly from independent Claim 1 and would be allowable when/if the independent claim is allowed.

12. Regarding applicant's arguments that ZHANG fails to disclose a plurality of crossing points, the applicant is advised that it has been held by the courts that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In this case, including using a plurality of the patented device of ZHANG to obtain a desired number of light emitting devices, or a required heat dissipation rate, would have flown naturally to one of ordinary skill, as detailed in previous section 8.

13. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the crossing points mounting a plurality of light emitting diodes) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case, Claim 1 defines the subject

matter of the invention as having at least one light emitting diode being mounted at the cross point; the single light emitting element of the patented device of ZHANG clearly meet such “at least one” limitation. In addition, it is noted that while the applicant refers to “light emitting diodes” in the arguments, the claims merely recite light emitting devices, not particularly LED.

14. Regarding applicant’s arguments that ZHANG teaches away from the proposed modification, it is noted that the applicant is using “teaching away” in a much broader sense that it is legally accepted. For a reference to be considered to teach away from a proposed modification such reference must criticize, discredit, or otherwise discourage the proposed combination. *In re Fulton*, 73 USPQ2d 1141 (Fed. Cir. 2004). The applicant is further advised that disclosed examples and/or preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments, even if such nonpreferred embodiments are described as somewhat inferior. See *In re Susi*, 169 USPQ 423 (CCPA 1971), and *In re Gurley*, 31 USPQ2d 1130 (Fed. Cir. 1994). In this case, the fact that ZHANG discloses a device featuring a single LED mounted at a single crossing point does not constitute a teaching away, as providing a plurality of the patented devices of ZHANG would meet the limitations of the instant claims, without changing the nature or mode of operation of such patented device.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negron whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee, can be reached on (571) 272-7044. The facsimile machine number for the Art Group is (571) 273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications maybe obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.



Ismael Negron
Examiner
AU 2885



JONG-SUK (JAMES) LEE
SUPERVISORY PATENT EXAMINER